

## Bulbostethus chrysopterus (Herrich-Schäffer), an Old Bug with a New Name (Heteroptera: Pentatomidae)

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Herrich-Schaffer (1844) described and figured an asopine pentatomid under the name of *Asopus chrysopterus*. Since then the name, like the proverbial football, has been kicked back and forth across the field of hemipteran nomenclature. Lethierry and Severin (1893) first included it in the genus *Canthecona* Amyot and Serville; later Schouteden (1907), in his monograph on the Asopinae in the *Genera Insectorum*, assigned it, questionably, to a place under his newly erected genus *Canthoconidea* and Kirkaldy in his *Catalogue* (1909) accepted this disposition. But, shortly thereafter, Bergroth (1915) in analyzing Schouteden's work on *Canthoconidea*, and separating the latter's sections A and B into two distinct genera, *Canthoconidea* Schouteden and *Eocanthoconea* Bergroth, pointed out that Herrich-Schaffer's species could not belong to either of these because it lacked the anteapical spines on the anterior femora, a prime requisite for both of the above, and suggested that a new generic name therefore be created. But Bergroth failed to erect such a name. Prior to this time, however, Schouteden (1907) had described an asopine from the Mariana Islands under the name of *Parealda bouvieri*, new genus, new species. Now, Usinger (1946) assigned *Asopus chrysopterus* Herrich-Schaffer to Schouteden's genus *Paraelda* and synonymized it with the latter's species *bouvieri* so that the new nomenclatural combination would have to read *Parealda chrysoptera* (Herrich-Schaffer). This appears to have been an error on Usinger's part. While Schouteden overlooked the aspinose condition of the anterior femora in *chrysopterus*, Usinger failed to consider, a. Herrich-Schaffer's description of the abdominal spine in his *Asopus chrysopterus* (" . . . der Bauch nach vorne sehr erhoben, der Dorn bis zu den Mittelbeinen reichend"), and b. Schouteden's specifications for the peculiar build of the mesosternum, metasternum, and abdomen of *Parealda* ("Mésosternum présentant de chaque côté du rostre une carène mince, moins élevées que celles du métasternum. Métasternum offrant de même deux carènes, mais fortes, à tranche libre épaisse et lisse, se prolongeant librement en avant et en arrière entre les hanches . . . Ventre proéminent à la base et s'appuyant contre le métasternum.").

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The implication here is that there is no long stout spine arising from the second abdominal segment that would reach between the mesocoxae as prescribed by Herrich-Schaffer.

All specimens, purported by Usinger to be *Parealda chrysoptera* (Herrich-Schaffer), were collected from Guam, Rota, Saipan, and Tinian in the Mariana Islands of Micronesia, and conform in all respects, both generic and specific, to Schouteden's description of *Parealda bouvieri*, but do not match the Herrich-Schaffer color plate (fig. 781) or his description of the species *Asopus chrysopterus*. The humeral spines are retrorsely curved and not elongated or directed anteriorly; the over-all color is darker reddish brown and not the required rusty yellow; the apical portion of the scutellum is eburnescent rather than concolorous; the abdominal spine is weak, short, and does not extend beyond the posterior margin of the metasternum, let alone being required to reach the mesocoxae, and the metasternum is strongly bicarinate, with a pronounced median sulcus between the carinae in which the distal segment of the rostrum lies. I feel certain that these specimens are definitely *Parealda bouvieri* Schouteden and should not be identified as *Parealda chrysoptera* (Herrich-Schaffer), despite Usinger's determination to the contrary.

In working over a collection of pentatomids received from the Bernice Bishop Museum in Honolulu, for the purpose of recording a faunal list of the Micronesian species of this family, a single female specimen has turned up that exactly meets every requisite set forth by Herrich-Schaffer for his *Asopus chrysopterus* and conforms to his colored plate. There are also eleven other specimens that, while slightly different in specific characters, agree with that single female specimen in the basic generic characteristics. I am convinced that this one specimen is the true *Asopus chrysopterus* of Herrich-Schaffer. It is quite distinct from specimens identified as *Parealda chrysoptera* (Herrich-Schaffer) by Usinger, Esaki, and Sailer. The body has the required shape, it is sordid yellow in color, overlain with reddish punctures producing a rusty aspect, the humeral processes are relatively long, and are directed anteriorly, becoming purplish brown apically, the anterior portion of the abdomen is well elevated and, in contour, continuous with the stout abdominal spine that reaches the mesocoxae and the anterior femora are aspinose. By the use of Schouteden's key for generic determinations (*Genera Insectorum*), this insect would run down to a place near *Podisus* Herrich-Schaffer. But there is at least one character which distinguishes this form from either *Podisus*, *Canthoconidea* or *Parealda*. That is the unique structure of the metasternum which here appears in the form of a small, elevated, bulbous subspherical body, the crest of which is as high or higher than the adjacent metacoxae; it is not hexagonal in shape with an emarginate posterior margin (*Canthoconidea*), nor bilaterally carinate with a median sulcus between the carinae (*Canthoconidea* and *Parealda*), nor rhomboidal and subimpressed (*Podisus*). Apparently this form is sufficiently distinct from other genera to have its own name. To that end the

name *Bulbostethus* is given to it to signify the presence of the spherical bulbous nature of the metasternum.

### **Bulbostethus**, new genus

Size intermediate, about 9.0 mm. long; mildly depressed above, convex below, strongly so at the anterior region of the abdomen; subrhomboidal in shape. Head and anterior portion of the pronotum mildly declivous; body densely and rather regularly punctured above, with the exception of the head which is more finely and sparsely punctured.

Head two-thirds to three-quarters of the medial length of the pronotum; margins before the eyes very mildly sinuate, then subparallel; juga and tylus subequal, neither more prominent than the other; subtruncately rounded apically; ocelli prominent and about four times as far apart as each is from the eye. Antennae reaching a little beyond the middle of the scutellum, the terminal four segments essentially subequal. Bucculae very low, subparallel, and uniting posteriorly in line with the antennal tubercles. Rostrum only moderately stout, the apex reaching between the hind coxae, segment I not attaining the base of the head; segments II and III equal, IV three-quarters of the length of III.

Pronotum more than two and a half times as wide across the humeral apices as long medially; anterior margin more deeply excavated than in *Parealda*, then obliquely truncate behind the eyes; anterolateral margins sinuate before the humeri, then straight and there calloused-crenulate to the base of the humeri, ending anteriorly in an acute, forward projecting denticle which just exceeds the width of the head through the eyes; humeri elongate, either produced forward or transversely, certainly not retrorsely curved, the apices subacutely rounded; posterior angles subprominent, obtusely rounded; posterior margin straight. Scutellum almost as wide at the base as long medially, the frenum ending just behind the middle, the margins from there onward subparallel, the apex subtruncate, the external angles obtusely rounded, the extreme margins of the apex impunctate; basal angles deeply foveate. Hemelytra rather regularly punctured, hardly denser so on the embolium than on the corium; a darker, laevigate, discal spot present; apical margin of the corium straight, the external angle roundly acute, not reaching the base of the sixth connexival segment; membrane uniform pale brown, exceeding the abdominal apex by about one-third of its length and devoid of a longitudinal dusky vitta; veins numerous and subparallel. Connexivum narrowly exposed, the sixth segment flaring somewhat; apical segmental angles somewhat produced and becoming progressively more acute posteriorly, those on the sixth segment terminating in a minute acute denticle, but not prolonged into a spine.

Pleura prominently and regularly punctured, lateral portions of the abdomen more finely and obscurely so, the central portion of the disc glossy and impunctate. Mesosternum provided with a low, flat-topped carina, somewhat dilated at

each end. Metasternum mildly elevated into a small, subglobular nodule or bulla-like structure, the crest of which is as high as the metacoxae, and which is neither emarginate behind, nor carinate laterally. Median spine of the second abdominal sternite stout, conical at the base, slightly compressed anteriorly, the apex acute, feebly curved dorsally there and reaching between the mesocoxae. Central portion of the abdominal disc strongly elevated anteriorly, there continuous with the surface of the median spine, and then gradually decreasing in height posteriorly; the surface strongly convex there but with no median keel or carina evident. Male provided with a pair of small sericeous plagae on the fourth and fifth abdominal sternites. Legs moderate in length, the anterior femora devoid of anteapical spines or tubercles; tibiae essentially terete, dorsal surface slightly flattened apically, certainly not sulcate.

Genotype: *Bulbostethus chrysopterus* (Herrich-Schaffer).

The resemblance between examples of this genus and *Parealda*, *Canthoconidea* or other Micronesian asopines is strictly superficial, the likeness being emphasized because of approximate similarity in size, color and shape. Schouteden, however, has stressed the diagnostic importance of other morphological characteristics, such as the structure of the mesosternum, metasternum, abdomen and abdominal spines, among others. In this respect then, *Bulbostethus* is distinctive because it does not show similarity of these parts to other known genera. It belongs to that complex of asopines in which the second rostral segment is shorter than the following two combined; the terminal rostral segment is shorter than the preceding; the femora are aspinose and the tibiae terete; the anterior portion of the abdomen is well elevated and provided with a stout spine which reaches but does not surpass the mesocoxae; and the metasternum is neither flat nor bicarinate.

While the foregoing description may seem overly detailed and somewhat lengthy, it follows the format for such descriptions established by Schouteden in his monograph on the Asopinae in the Genera Insectorum. Some of the diagnostic characteristics given are probably of specific as much as generic magnitude, but are included for the sake of completeness.

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